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EXAMINER

MANCHO, RONNIE M

ART UNIT PAPER NUMBER

3663

DATE MAILED: 07/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/063,092

Applicant(s)

DILODOVICO ET AL.

Examiner

Ronnie Mancho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-7, 10-14, 17-21 rejected under 35 U.S.C. 102(b) as being anticipated by Turnbull et al (6166698).

Regarding claim 1, Turnbull et al (col. 25, lines 2-48) disclose a real time stamp synchronization system for an automotive vehicle comprising:

a vehicle clock 156 (fig. 6, col. 16, lines 42-46) storing a current time (col. 25, lines 16-48);

a time receiver 115 (fig. 6, col. 7, lines 66 to col. 8, lines 1-9) receiving a real time signal (i.e. clock signal from GPS satellite);

an object detection system (col. 7, lines 66 to col. 8, lines 1-13; fig. 6) generating an object detection signal (col. 7, lines 66 to col. 8, lines 1-13; fig. 6); and

a collision system (black box, i.e. data recorder) controller 110 (col. 25, lines 16-48) electrically coupled to said vehicle clock 156 (fig. 6, col. 16, lines 42-46), said time receiver 115, and said object detection system (col. 7, lines 66 to col. 8, lines 1-13; fig. 6), said collision controller 110 synchronizing said current time with said real time (col. 25, lines 2-48) and storing said object detection signal (col. 25, lines 2-48; col. 7, lines 66 to col. 8, lines 1-13; fig. 6) in synchronization with said real time signal (i.e. clock signal from satellite).

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Regarding claim 2, Turnbull et al (col. 25, lines 2-48) disclose the system as in claim 1 wherein said collision system controller 110 synchronizes said real time signal with a time stored on a clocking system (clocks on other vehicles, col. 25, lines 31-40) other than said vehicle clock.

Regarding claim 3, Turnbull et al (col. 25, lines 31-40) disclose the system as in claim 1 wherein said collision system controller stores collision event related information synchronized to said real time signal (i.e. clock signal from satellite).

Regarding claim 5, Turnbull et al (col. 25, lines 31-40) disclose the system as in claim 1 further comprising a vehicle sensor complex (see various sensors, figs. 6&7; col. 9, lines 34- 66) generating a vehicle sensor complex signal, said collision system controller (col. 25, lines 24-67) electrically coupled to said vehicle sensor complex and storing said vehicle sensor complex signal in synchronization with said real time signal (i.e. clock signal from satellite).

Regarding claim 6, Turnbull et al (col. 25, lines 2-40) disclose the system as in claim 1 further comprising restraints control module (i.e. airbag module) generating a restraints control signal, said collision system controller electrically coupled to said restraints control module and storing said restraints control signal in synchronization with said real time signal (i.e. clock signal from satellite).

Regarding claim 7, Turnbull et al (col. 25, lines 31-40) disclose the system as in claim 1 further comprising a vehicle dynamic controller (application of vehicle brakes, col. 24, lines 60-67) generating a vehicle dynamic signal, said collision system controller 110 electrically coupled to said vehicle dynamic controller and storing said vehicle dynamic signal (col. 25, lines 24-57) in synchronization with said real time signal (i.e. clock signal from satellite).

Regarding claim 10, Turnbull et al (col. 25, lines 31-40) disclose the system as in claim 1 further comprising a personal electronic system (e.g. 21, col. 25, lines 61-67; col. 20, lines 44-59) electrically coupled to said collision system controller 110, said personal electronic system synchronizing a personal electronic system clock with said real time signal (time is synchronized since Turnbull calls for time stamping activities in car synchronized to GPS time and stored in hand held receiver to be later retrieved and analyzed).

Regarding claim 11, Turnbull et al disclose the system as in claim 10 wherein said personal electronic system is electrically coupled to said collision system controller 110 by a communication transport or port (col. 25, lines 41-67).

Regarding claim 12, Turnbull et al disclose the system as in claim 1 wherein said collision system controller 110 is in wireless communication with one or more vehicle related systems (col. 25, lines 41-67; see for e.g. fig. 1).

Regarding claim 13, Turnbull et al (col. 25, lines 31-40) disclose a collision evaluation system for reconstructing a vehicle collision event comprising:

a real time stamp synchronization system (col. 25, lines 24-57), said real time stamp synchronization system receiving a real time signal from a time center (col. 12, lines 31-43; col. 25, lines 24-40) and synchronizing a vehicle clock to said real time signal, said real time stamp synchronization system generating a vehicle collision event signal corresponding to the collision event in real time (col. 25, lines 24-57);

said real time stamp synchronization system comprising:

an object detection system (col. 7, lines 66 to col. 8, lines 1-13; fig. 6) generating an object detection signal (col. 7, lines 66 to col. 8, lines 1-13; fig. 6); and

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a collision system (black box, i.e. data recorder) controller 110 (col. 25, lines 16-48) electrically coupled to said object detection signal (col. 7, lines 66 to col. 8, lines 1-13; fig. 6), and storing said object detection signal (col. 25, lines 2-48; col. 7, lines 66 to col. 8, lines 1-13; fig. 6) in synchronization with said real time signal (i.e. clock signal from satellite); and

a collision evaluation center (col. 25, lines 12-15; lines 63-67; lines 58-60) in communication with said vehicle, said collision evaluation center storing said vehicle collision event signal (col. 24, lines 61 to col. 25, lines 1-11; col. 25, lines 63-67. Note! As known in the art and expressed by Turnbull, it is inherent that collision data is transmitted from a vehicle and stored remotely at a collision center), said collision evaluation center reconstructing said collision event in response to said vehicle collision event signal (col. 24, lines 61 to col. 25, lines 1-11; col. 25, lines 63-67).

Regarding claim 14, Turnbull et al (col. 25, lines 31-40) disclose the system as in claim 13 wherein said time center includes a satellite.

Regarding claim 17, Turnbull et al disclose a method of real time stamping synchronization of automotive vehicle related systems for an automotive vehicle comprising:

storing a current time on a vehicle clock (col. 25, lines 2-40);

receiving a real time signal (col. 25, lines 31-40);

synchronizing said current time with said real time signal (col. 25, lines 31-40);

an object detection system (GPS system, col. 7, lines 66 to col. 8, lines 1-13; fig. 6) generating an object detection signal (GPS system, col. 7, lines 66 to col. 8, lines 1-13; fig. 6); and

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storing said object detection signal (col. 25, lines 2-48; col. 7, lines 66 to col. 8, lines 1-13; fig. 6) in synchronization with said real time signal (i.e. clock signal from satellite).

Regarding claim 18, Turnbull et al disclose the method as in claim 17 further comprising synchronizing said real time signal with time stored on a clocking system (clocks on other vehicles, col. 25, lines 31-40) other than said vehicle clock.

Regarding claim 19, Turnbull et al disclose the method as in claim 18 further comprising storing collision event related information synchronized to said real time signal (col. 25, lines 24-40).

Regarding claim 20, Turnbull et al disclose a method of reconstructing a collision event comprising:

generating and transmitting a real time signal (col. 25, lines 24-40);

receiving said real time signal and synchronizing a vehicle clock to said real time signal (col. 25, lines 31-67);

an object detection system (GPS system, col. 7, lines 66 to col. 8, lines 1-13; fig. 6) generating an object detection signal (GPS system, col. 7, lines 66 to col. 8, lines 1-13; fig. 6);

storing said object detection signal (col. 25, lines 2-48; col. 7, lines 66 to col. 8, lines 1-13; fig. 6) in synchronization with said real time signal (i.e. clock signal from satellite);

generating a vehicle collision event signal corresponding to the collision event in real time (col. 25, lines 2-67);

storing said vehicle collision event signal (col. 25, lines 31-40); and

reconstructing the collision event in response to said vehicle collision event signal (col. 25, lines 61-67; col. 24, lines 60-67).

Regarding claim 21, Turnbull et al disclose method as in claim 20 further comprising modifying a vehicle related system (air bag deployment, col. 24, lines 61-67) in response to said vehicle collision event signal.

3. Claims 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turnbull et al in view of Breed (US 2003/0009270).

Regarding claim 8, Turnbull et al (col. 25, lines 31-40) disclose the system as in claim 1, but did not particularly mention an occupant assessment system. However, Breed teaches of a collision system (sections. 0201, 0205, 0206; 0215, 0216, 0219, fig. 3) comprising an occupant assessment system (414, 426) generating an occupant assessment signal (sections 0556 & 0557), a collision system (black box, section 0201) controller 416 electrically coupled to said occupant assessment system (414, 426) and storing said occupant assessment signal (sec. 0557) in synchronization with a real time signal (GPS time, section 0524; abstract). Therefore, it would have been obvious to one of ordinary skill in the art of vehicle systems to modify the Turnbull et al device as taught by Breed for the purpose determining the well being or health of an occupant during an accident in relation to real accurate time. This would be very obvious since Breed (sec. 0558) teaches that his system could be used in conjunction with other systems.

Regarding claim 9, Turnbull et al (col. 25, lines 31-40) disclose the system as in claim 1, but did not particularly mention a telematics system 418 (figs. 3&12). However, Breed teaches of a telematics system (sections 0006-0008, 0362, 0371) electrically coupled to a collision system controller (fig. 3), said telematics system generating and transmitting a vehicle and occupant assessment signal in synchronization with said real time signal (GPS time, section 0524; abstract). Therefore, it would have been obvious to one of ordinary skill in the art of

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vehicle systems to modify the Turnbull et al device as taught by Breed for the purpose determining and communicating the well being or health of an occupant during an accident in relation to accurate GPS time. This would be very obvious since Breed (sec. 0558) teaches that his system could be used in conjunction with other systems.

4. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turnbull et al (6066698) in view of Jandrell (5526357).

Regarding claim 15, Turnbull disclosed the system as in claim 13, but did not particularly mention a weather station although they disclosed a GPS system which is well known to operate with a weather station. However, Jandrell teaches of a time center (col. 18, lines 16-32; col. 4, lines 10-29) including a weather station (col. 27, lines 17-23). Therefore it would have been obvious to one of ordinary skill in the art of vehicle time synchronization to modify the Turnbull device as taught by Jandrell (abstract) for the purpose of providing multilateral information. Note that Turnbull (col. 12, lines 35+) had indicated that reference time could be taken from any source.

Regarding claim 16, Turnbull disclosed the system as in claim 13, but did not mention a traffic control station. However, Jandrell teaches of a system wherein a time center 400 (col. 18, lines 16-32) includes a traffic control station (col. 27, lines 17-23). Therefore it would have been obvious to one of ordinary skill in the art of vehicle time synchronization to modify the Turnbull device as taught by Jandrell (abstract) for the purpose of providing multilateral information including coded accurate traffic control.

Response to Arguments

5. Applicant's arguments filed 4-30-03 have been fully considered, but they are not persuasive for the following reasons:

The applicant is arguing that the prior art Turnbull does not disclose an object detection system. In response, the examiner respectfully disagrees. As already mentioned by the applicant, the invention involves detection of objects such as an automobile. Turnbull et al disclose a GPS system well known for detection of the position, speed, direction of travel, time, etc of a vehicle as admitted by the applicant. Note that the limitation --- detection of objects in proximity with a host vehicle --- was not a limitation of any of applicant's claims as argued by the applicant. Even if the limitation was part of the claims, the collision system of Turnbull anticipates the claim since collision systems are well known for incorporating sensors for detecting objects in proximity with a host vehicle.

Therefore, Turnbull et al disclose --- an object detection system (GPS system, col. 7, lines 66 to col. 8, lines 1-13; fig. 6) generating an object detection signal (GPS system, col. 7, lines 66 to col. 8, lines 1-13; fig. 6); storing said object detection signal (col. 25, lines 2-48; col. 7, lines 66 to col. 8, lines 1-13; fig. 6) in synchronization with said real time signal (i.e. clock signal from satellite) ---. Hence Turnbull anticipates the claims argued above in combination with the other limitations.

Next, the applicant argues that Turnbull et al do not teach receiving a real time signal from a time center such as NIST. In response, receiving a real time signal from a time center such as NIST was not part of the claim limitation. Applicant's claims must stand distinguished

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from the prior art. As a matter of fact, NIST is also synchronized to GPS. In addition GPS uses atomic clocks.

Therefore, the rejection is proper and stands.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 703-305-6318. The examiner can normally be reached on Mon-Thurs: 9-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Black can be reached on 703-305-8233. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Ronnie Mancho
Examiner
Art Unit 3663

July 11, 2003


THOMAS G. ELACK
SUPERVISORY PATENT EXAMINER
GROUP 3602